

Amendment under 37 C.F.R. § 1.111
Attorney Docket No. 091678
Application No.: 10/523,985

REMARKS

Claims 42-48 are pending in the present application. Claims 1-14 and 17-41 are canceled.

Claims 42-48 are newly added. No new matter has been presented.

Support for the new claims is in the original specification at, *e.g.*, page 19.

The specification is also amended as shown in the attached substitute specification. The substitute specification includes no new matter.

Claim Objections

Claims 11 and 12 were objected to due to informalities. Claims 11 and 12 have been cancelled. Withdrawal of the claim objections is requested.

Claim Rejections - 35 U.S.C. § 112

Claims 4, 5, 11, 12, 19, 29, 30 and 32-34 were rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Claims 4, 5, 11, 12, 19, 29, 30 and 32-34 have been cancelled.

Claims 4, 5, 11, 12, 19, 32-34 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Office Action stated that it is unclear whether “electrolyte” in the phrase “said electrolyte includes anions which include,” refers to the “solid electrolyte layer” or the electrolyte included in the conductive polymer.

The attached substitute specification and the new claims clarify the terms electrolyte and electrolyte solution. The electrolyte solution is an electrolyte dissolved in solvent. Solid

Amendment under 37 C.F.R. § 1.111
Attorney Docket No. 091678
Application No.: 10/523,985

electrolyte is an ion-exchange resin, or an ion-exchange resin containing an electrolyte. (*See, e.g.*, original specification, page 1.)

Withdrawal of the § 112 rejections is requested.

Claim Rejections - 35 U.S.C. §§ 102 and 103

Claims 4, 5, 11, 12, 19-24, 29, 30 and 32-38 were rejected under 35 U.S.C. § 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as being obvious over **Madden** (US 6,249,076); claims 40 and 41 were rejected under 35 U.S.C. § 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over **Madden**; and claim 39 was rejected under 35 U.S.C. § 103(a) as being unpatentable over **Madden**.

Favorable reconsideration is requested.

Claims 1-14 and 17-41 have been cancelled. The discussion below describes the patentability of new claims 42-48 with regard to the Madden reference.

(1) Applicants respectfully submit that Madden does not teach or suggest “electrolyte solution containing operational electrolyte, wherein said operational electrolyte is anions which include trifluoromethanesulfonate ion and/or plural of fluorine atoms which bond to central atom” as recited in new claim 42.

Although the description of an actuator exists in Madden, the reference does not disclose the specific actuator as recited in claim 42, *i.e.*, Madden does not disclose an actuator using an operational electrolyte for activating the actuator, and electrolyte solution containing the operational electrolyte.

Amendment under 37 C.F.R. § 1.111
Attorney Docket No. 091678
Application No.: 10/523,985

(2) Applicants respectfully submit that Madden does not teach or suggest “wherein said conductive polymer incorporates the anions which include trifluoromethanesulfonate ion and/or plural of fluorine atoms which bond to central atom” as recited in new claim 43.

Claim 43 specifies that the operational electrolyte (anions) in activating the actuator and anions are used in producing a conductive polymer (polymerization). Madden does not disclose this feature.

The present invention as recited in the claims has an excellent effect that large electrochemical strain (deformation ratio) can be obtained by using the anions as the operational electrolyte. Madden is silent about such an effect.

For at least the foregoing reasons, claims 42-48 are patentable over the cited references. Accordingly, withdrawal of the claim rejections is hereby solicited.

In view of the aforementioned amendments and accompanying remarks, Applicants submit that the claims, as herein amended, are in condition for allowance. Applicants request such action at an early date.

If the Examiner believes that this application is not now in condition for allowance, the Examiner is requested to contact Applicants’ undersigned attorney to arrange for an interview to expedite the disposition of this case.

Amendment under 37 C.F.R. § 1.111
Attorney Docket No. 091678
Application No.: 10/523,985

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,
WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP

/Andrew G. Melick/

Andrew G. Melick
Attorney for Applicants
Registration No. 56,868
Telephone: (202) 822-1100
Facsimile: (202) 822-1111

AGM/adp

Attachments: Substitute Specification (Clean Copy)
Marked-up Version of Substitute Specification